

Lesson 4 Virus'.notebook

Virus'

- special micro-organisms that do not fit into any of the 6 kingdoms
- unique in that they are lifeless outside a living cell, but can use a living thing to produce copies of itself (replicates)
- occupies a position between living and non living

Viruses.video.asx



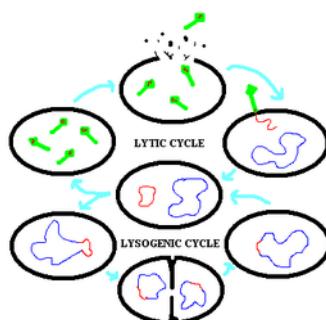
- composed of a core of DNA or RNA surrounded by a protein coat called a CAPSID
- can infect a cell in 2 different ways

A. Lytic Pathway (BULLY)

- gains access to the host cell by releasing an enzyme to breakdown the cell membrane
- once in the cell the virus will gain control of the cells normal activities and instruct it to use the cell components to make new copies of itself
- the new virus' will then burst out of the cell destroying the cell in the process - goes and infects other cells

2. Lysogenic Pathway (Back stabber)

- virus will gain entry into a cell in the same way as described above
- this time the virus will not immediately shut down the cell but instead will have its genetic material join the cell genetic material
- as the cell divides into new cells each new cell will have some of the viral DNA in it
- then at some point the virus will take over the cell in the same manner as with the Lytic pathway, eventually making copies of itself and then destroying the cell.



- since virus' aren't living antibiotics will not destroy them
- vaccinations are the only way to help avoid viral infections
- your immune system plays the major role in fighting viral infections
- there are a few antiviral medications on the market as well
- eat properly, exercise, get at least 8 hrs sleep, don't smoke are all ways to help your immune system, wash your hands
- examples of viral infections are: common cold, influenza, AIDS, Chicken pox, Hepatitis, H1N1 and ebola

Review questions:

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Attachments

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